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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,795	09/29/2006	Yoshio Sasaki	8048-1195	6720
465 7590 04/02/2009 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER ORTIZ CRIADO, JORGE L.	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 04/02/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/594,795

**Applicant(s)**

SASAKI ET AL.

**Examiner**

JORGE L. ORTIZ CRIADO

**Art Unit**

2627

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/31/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-15 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-15 and 20-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Applicant's amendments have been considered with the following office action results.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-15 and 20-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13, 23 and 24 recites the limitation "wherein the recording power of the long mark is determined such that waveform distortion does not occur or the waveform distortion becomes equal to or smaller than a predetermined value, the waveform distortion indicating a ratio of distortion amount of an RF signal generated by reproducing recording marks recorded by the test writing".

A **ratio** is an expression which compares quantities which involve at least **two** quantities or any number of quantities which can be compared. In other words it is a proportional relationship between two different numbers or quantities.

The claimed invention appears recites distortion "ratio" of only one amount/quantity is being considered (i.e. distortion amount). Hence, it is unclear what the applicant is intending to encompass with this language, and one of an ordinary skill in the art would apprise the scope of the invention for such "ratio" if any.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13-15 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masui U.S. Patent No. 7,301,870 in view of Sasaki et al. WO2004/077418 (Please refer to corresponding English document US Pat. No.7,230,895 use herein).

As per claim 13, Masui discloses an information recording apparatus (fig. 1) which irradiates a laser light onto a recording medium and forms a recording mark corresponding to a recording signal (see fig. 4), comprising: a light source (luminous source; in pickup 4) which emits the laser light; a signal generating unit (10) which generates a recording pulse signal for driving the light source based on the recording signal; and a test writing unit (12) which drives the light source based on the recording pulse signal and executes test writing, wherein the recording pulse signal includes a mark period for forming the recording mark and a space period for forming no recording mark (see figure 4), and wherein the test writing unit executes the test

writing (S4 Fig. 6; S17 Fig. 9; S27 Fig. 10) with making a recording power (PW5-14)) of a long mark constant (set to as obtained previously) and varying a recording power (Pw3) of a short mark (see col. 10 lines 11-15; col. 12, lines 11-20; ).

Masui teaches that the long mark is determined based on the RF signal generated, and in consideration of some waveform distortion such as jitter etc. equal to or smaller than a predetermined value or simply reduced to not occur because it is desirable not to obtain jitter, but does not expressly disclose and particularly that the waveform distortion indicating a ratio of distortion amount of an RF signal generated by reproducing recording marks recorded by the test writing.

However, taking in consideration the distortion ratio particularly a ratio of a distortion amount to a magnitude of the reproduction waveform, when performing test writing for long marks is well known in the art, and is evidenced by Sasaki et al. as described with respect to Figs. 6 and 5C.

Therefore, it would have been obvious to one of an ordinary skill in the art at the time of the invention to consider the above "ratio" in order to perform the recording with the optimum recording characteristic when effecting power calibration process, as taught by Sasaki et al.

As per claim 14, Masui discloses wherein the recording power (PW) of the long mark is a recording power ensuring reproduction compatibility (as specified optimum power).

As per claim 15, Masui discloses wherein the recording power of the long mark is a recording power making a modulation degree (m) within a predetermined range (see col. 9, lines 26-34).

As per claim 20, Masui discloses wherein the short mark is a shortest mark (3T) and the long mark is a mark other than the short mark (5T or longer).

As per claim 21, Masui discloses wherein the short mark is a shortest mark (3T) and a second shortest mark (another 3T or 4T), and the long mark is a mark other than the short mark (5T or longer).

As per claim 22, Masui discloses wherein the short mark is a mark which does not have a level of no largest magnitude, and the long mark is a mark which has a level of largest magnitude (see fig. 7).

Claim 23 is drawn to the apparatus performing the method of claim 1 and is rejected for the same reasons of obviousness as used above.

Claim 24 is drawn to the method of claim 1 provided in a program product and is rejected for the same reasons of obviousness as used above.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JORGE L. ORTIZ CRIADO whose telephone number is (571)272-7624. The examiner can normally be reached on Mon.-Fri 10:00 am- 6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jorge L Ortiz-Criado/  
Primary Examiner, Art Unit 2627